

EPA Response to MOU Partner comments on 2015 Draft Final RI Report

January 8, 2016

Section 1 Introduction

Comment: As Yakama has requested previously, the oversight and guidance from the tribes, and other government team members, should be acknowledged, most appropriately in the third paragraph on the first page.

Response: EPA has added language to include MOU partners.

Section 2 Study Area Investigation

Comment: It might be helpful to remind readers in this section, or perhaps in the introduction, that most of the data and other information that is the basis of the RI are five years old or older. Some of the data in Section 2 are nearly 20 years old and much of the chemical data is over a decade old. While in many cases the rates of change in the river characteristics appear to be longer than a decade, care should be taken in assuming that these older data are applicable to specific current locations or processes. It will be important to accurately characterize sites during the remedial design and clean up stages.

Response: The language suggested seems to indicate that the data is not representative of the site and a decision cannot be made. EPA disagrees. The report clearly states when the data were collected. This report is only discussing the remedial investigation and the data collected. It is not discussing how the data will be used. EPA believes that the data is sufficient to complete the RI/FS and to base a remedy decision.

Section 3 Environmental Setting

Comment: As noted previously, the Yakama would appreciate more specific emphasis to be placed on the role of the Willamette River as a major tributary to the Lower Columbia River.

Response: It is unclear what information is missing that the commenter would like added to the text. This section refers extensively to the connection of the Willamette and Columbia rivers.

Comment: The report is fairly accurate in describing the complexity of the shallow groundwater flow over the entirety of the site. Because groundwater may be a continuing source of contamination to the river, this complexity will need to be carefully considered as part of any proposed clean up. Similarly, the status of remediation of upland sites must be kept in mind.

Response: Comment noted.

Comment: On an editorial basis, in the last line on page 3-22, a flow volume of 118, 300 cfs is given for RM 4.1, which seems high. This value should be checked.

Response:

Section 5. In-River Distribution of Contamination

Comment: This section emphasizes the information obtained for the “indicator” contaminants. Numerous other substances are present at concentrations posing risk to humans or natural resources. The remediation at Portland Harbor will focus on a limited suite of substances, so it will be important to make sure that all other contaminants posing unacceptable risk are addressed in the process.

Response: EPA acknowledges that Section 5 discusses a limited number of contaminants. Appendix D presents additional information on other contaminants. The remediation at Portland Harbor will focus on all COCs that pose unacceptable risk.

Section 6. Loading, Fate, and Transport of Selected Contaminants

Comment: This section should include a discussion regarding the potential for exceptional floods to alter sediment accumulation and erosion. The information in this section is based primarily on a decade or so of lesser winter flows and so may not represent the full range of processes in the river.

Response: This section discusses the information measured at the site and is not meant to represent every possible condition.

Section 7. Determination of Background Concentrations

Comment: This section should discuss that the background data were collected almost a decade ago and that background is expected to change over time, particularly as inputs to the watershed are controlled. In the FS, a factor should be applied to background to reflect the likely lower concentrations currently entering the site.

Response: The data collected and evaluated in the RI were all collected during the same time frame. Since no time-series data were collected, it is unknown whether the contaminant concentrations are increasing or decreasing. To apply a factor to the background concentration is unfounded and there is no scientific evidence to support doing so.

Comment: There were several editorial comments suggested.

Response: EPA made editorial changes where appropriate.

Comment: There appears to be a discrepancy between what is reported in Table 7.3-1 and what is described here. For instance, Total DDx is listed as having no background calculated, while dieldrin does appear to have background calculated. Please correct the text and/or table accordingly.

Response: EPA agrees and has corrected the information on DDx in the table.

Section 8. Baseline Human Health Risk Assessment Summary

Comment: This section uses the higher cancer risk criterion of 1×10^{-4} , rather than the more protective 1×10^{-6} . While the higher criterion can focus the discussion on the major risks, it downplays the totality of risks at the site. It would be better to use the lower criterion in the text discussion to highlight the extent of the risks.

Response: EPA only takes action where risks exceed 1×10^{-4} . Once there is a basis for action, risks are to be reduced to within the acceptable risk range of 1×10^{-6} to 1×10^{-4} .

Comment: The uncertainty section overemphasizes the conservative nature of the risk assessment. Many of the factors in the risk assessment could easily underestimate the risks. The discussion should be more balanced.

Response: This section is merely summarizing the findings of the risk assessment. There was no discussion in the risk assessment of factors that could underestimate the risks.

Comment: The text includes a discussion of regional contamination of fish that is irrelevant and misleading. It clearly implies that the problems in Portland Harbor are not just from releases at the site, which seems to downplay the utility of cleaning up the site.

Response: EPA believes that it is important to acknowledge that there are issues, such as regional contamination, that will limit the ability to clean up the site. We do not agree that it downplays the utility of cleaning up the site.

Comment: No contaminants are presented in Table 8.4-2. Perhaps this refers to a table in the Human Health Risk Management Recommendations document? Please correct accordingly.

Response: EPA agrees. Table 8.4-2 presents the CT risks. EPA has directed the LWG to include a new table 8.4-3 with the list of contaminants.

Comment: There were several editorial comments suggested.

Response: EPA made editorial changes where appropriate.

Section 9. Baseline Ecological Risk Assessment Summary

Comment: Section 9.6.2 includes a discussion of using the Floating Percentile Model (FPM) to calculate sediment quality values. It was our understanding that there was agreement that the FPM would not be used to generate SQVs. This section should be edited to remove the discussion and the FPM-derived SGV values to avoid confusion caused by having a range of SQVs.

Response: This sections is merely describing what was done in the BERA. The BERA did develop and evaluated SQVs from the FPM.

Comment: It's not clear why Section 9 includes a CSM when a more complete one is included as Section 10. It would be clearer to simply remove the Section 9 CSM discussion.

Response: Section 10 does not provide a more complete CSM. A CSM is described in EPA guidance as information on the waste sources, pathways, and receptors at a site. The graphical picture in Section 10 is too simplistic to represent the site-specific CSM. The CSM was developed for both the BERA and BHHRA. Both these figures are more accurate and specific to this site.

Comment: This table [Table 9.10-3] intends to highlight the LOEs for assessment endpoints for which no eco risks are identified. However, not every assessment endpoint reports an LOE. We suggest either removing assessment endpoints that have no LOE or providing LOEs for all assessment endpoints.

Response: EPA agrees and has added that the measurement endpoint or LOE for each assessment endpoint was used. The table title has also been revised to reflect this.

Comment: There were several editorial comments suggested.

Response: EPA made editorial changes where appropriate.

Section 10. Conceptual Site Model Summary

Comment: As noted above, it would be helpful if the report were more precise about the dates of the information used in the developing this CSM. For example, Section 10.1.3.2 is titled "Current," referring to sources of contamination, but the previous discussions in Section 4 indicate that most of the source data in the RI are at least a few years old. It should be clarified that a) the report is current as of a specific date, and b) that many factors at the site continue to change as time passes.

Response: Sections 1 and 2 clearly specify the dates that information was collected for the RI Report. It is not necessary to continually repeat that information throughout the document.

Comment: Section 10.1.4. The discussion of loading should clarify the distinction between loading and concentration. It is reasonable to assume that the large volumes of water and particulates carried by the river were always a major source of the mass of contamination passing through the site, but these loads were not at concentrations sufficient to lead to the high concentrations that are present in the sediments at the local sites. The present discussion could lead the reader to the conclusion that remediation is unnecessary or will be ineffective.

Response: Section 10.1.2 clearly states that the majority of the contaminant concentrations within the site come from sources, not from loading. Section 10.1.4 is merely describing the external loads coming into the site.

Comment: There were several editorial comments suggested.

Response: EPA made editorial changes where appropriate.

